# Nassaria vermeiji (Gastropoda: Buccinidae), a new species from Guam

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**ABSTRACT.** Nassaria vermeiji sp. nov. is described from Guam and compared to N. miriamae (Dell, 1967) from Kermadec Ridge.

## INTRODUCTION

The genus *Nassaria* Link, 1807 comprises a large number of species living in moderately deep to deepwater in the Indo-West Pacific. Many species have elegant and attractively coloured and patterned shells. In the present paper we describe *Nassaria vermeiji* as new to science, hereby enlarging the range of the genus to Micronesia. An oceanic *Nassaria* species was previously only known by *N. miriamae* (Dell, 1967) from Kermadec Ridge.

# **Abbreviations**

Depositories

GV: collection Geerat Vermeij, USA. HK: collection Hugo Kool, Netherlands. KF: collection Koen Fraussen, Belgium.

MNHN: Muséum national d'Histoire naturelle, Paris, France.

NMNZ: Museum of New Zealand *Te Papa Tongarewa*, Wellington.

PS: collection Peter Stahlschmidt, Germany. RS: collection Richard Salisbury, USA.

Other abbreviations dd: empty shell. lv: live collected specimen.

# **SYSTEMATICS**

Family **BUCCINIDAE** Rafinesque, 1815 Genus *Nassaria* Link, 1807

Nassaria Link (1807: 123), type species by subsequent designation (Eames, 1952): Nassaria lyrata Link, 1807, a junior synonym of Neptunea pusilla Röding, 1798.

Remarks. The genus and its systematic placement is under revision. Listing synonyms for *Nassaria* and

discussing its placement in the Buccinidae is beyond the scope of the present paper.

> Nassaria vermeiji sp. nov. Figs 1-10

Holotype, 29.0 mm, Guam, Agana Bay, in fish traps, 1800 feet (about 550 m), 13/3/1975. MNHN IM-2000-27910

Paratypes 1-2, 26.6-28.0 mm, same locality, RS.

Paratype 3, 27.4 mm, same locality, KF-5631.

Paratype 4, 27.7 mm, same locality, PS.

Paratype 5, 24.5 mm, Guam, off Oca Point, in shrimp traps, 1200 feet (about 360 m), GV.

Paratype 6, 21.6 mm, juvenile, same locality, KF-7339.

Paratype 7, 29.3 mm, Guam, deep water, KF-5681. Paratype 8, 35.4 mm, Northern Mariana Islands, Esmeralde Bank, by scuba divers, HK.

Type locality. Guam, Agana Bay, in fish traps, 550 m.

Material examined. Guam, Agana Bay, in fish trap, about 550 m, 5 lv; off Oca Point, about 360 m, in shrimp traps, 2 lv (1 jv); "deep water", 1 lv.

Northern Mariana Islands, Esmeralde Bank, shallow water, 1 dd, HK.

Range. At present only known from Micronesia: off Guam and from Esmeralde Bank (Mariana Islands).

**Description.** Shell medium for the genus (up to 35 mm), thin but solid, slender, fusiform with high spire and constricted base. Teleoconch with 7 1/4 convex whorls. Sculpture rather reticulate, sharp, axial sculpture dominant on all whorls. Colour pale yellowish; with 2 brown spiral bands situated subsuturally and suprasuturally; with fine, interrupted, dark brown spiral lines on top of spiral cords, axial ribs white. Suprasutural cord being broad peripheral

band on body whorl. Base with paler band, siphonal canal darker.

Protoconch consisting of 1 1/2 glossy whorls, last ½ whorl with 2 spiral cords, crossed by fine axial riblets. Transition to teleoconch indistinct, marked by appearance of axial teleoconch sculpture.

Teleoconch beginning with 3 fine spiral cords, subsutural one finer, interspaces narrow. Second whorl with 1 secondary spiral cord appearing in each spiral interspace; an additional fine, subsutural spiral cord appearing. Fourth whorl with 4 sharp spiral cords, including 2 finer subsutural; interspaces with 1 or 3 secondary spiral cords, middle cord stronger. This cord gradually growing in strength along third whorl. Antepenultimate and penultimate whorls with 8 or 9 spiral cords, alternating sharp and finer; interspaces broad, with 1 fine secondary spiral cord. Body whorl with about 24 such spiral cords of which 4 or 5 on siphonal canal.

First 2 upper spire whorls with 11 rather sharp axial ribs; interspaces rather narrow. Third whorl with 12, fourth with 13 such axial ribs, interspaces slightly broader. Penultimate whorl with 12, body whorl with 10 axial ribs including prelabral varix. Axial ribs running from just below suture, separated from preceeding whorl by narrow, flat subsutural band, to abapical suture. Axial ribs moderately angulate above abapical suture forming suprasutural canaliculation. Spiral interspaces on all whorls crossed by fine incremental lines. All axials of equal strength without stronger varices. Prelabral varix separated from penultimate whorl by forming a shallow, narrow notch.

Aperture of medium size, round. Outer lip thick; edge sharp, glossy; with about 12 small, internal knobs. Columella gently curved; parietal with 3 cords formed by sculpture of underlaying whorl; callus thin, adherent to shell, with some brown streaks according to pattern of underlaying whorl. Siphonal canal short, narrow but open. Aperture and siphonal canal together slightly more than 2/5 of total shell length.

Periostracum (paratype 6, juvenile) velvety, consisting of fine axial lamellae.

**Comparison.** *Nassaria vermeiji* sp. nov. is characterized by the absence of axial varices, the low number of axial ribs along the body whorl and by the

rather sharp reticulate sculpture but without forming spiny knobs where spiral and axial sculpture are crossing.

The specimen from Esmeralde Bank differs by the slightly higher number of axial ribs (14 on the penultimate whorl instead of 12), the axials are more pronounced resulting in an accentuated subsutural canal above the axial ribs and by the slightly larger size. The fifth remaining whorl of this specimen, however, looks more similar the penultimate whorl of the holotype.

Nassaria miriamae (Dell, 1967) (type locality: AUZ 114, off Curtis Island, Kermadec Islands, near 30°26'S, 178°15'W, deeper as 500 fms [914 m]) is similar in sculpture but differs by the higher spire, the higher number of whorls, the more convex whorls, the reddish-brown colour without distinct patterned bands and the larger adult size.

**Etymology.** Nassaria vermeiji sp. nov. is named to honour Geerat Vermeij (USA) for the many years of friendship and for his incomparable knowledge of molluscan evolution.

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- 4-5. Paratype 2, 28.0 mm, same locality, RS.
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- 10. Paratype 8, 35.4 mm, Northern Mariana Islands, Esmeralde Bank, HK.
- 11. Nassaria miriamae (Dell, 1967), 44.5 mm, holotype, AUZ 114, off Curtis Island, Kermadec Islands, near 30°26'S, 178°15'W, deeper as 500 ftms, in NMNZ- M.021300 (photo CC BY-NC-ND licence).

